

In the Claims

Claims 1-24 (Cancelled)

Claim 25 (Currently amended): A method for identifying an insecticidal compound wherein said method comprises contacting a candidate compound with a trypsin modulating oostatic factor (TMOF) receptor and determining if said candidate compound binds to [a] the TMOF receptor.

Claim 26 (Original): The method, according to claim 25, wherein said receptor is expressed at the surface of a cell.

Claim 27 (Original): The method, according to claim 25, wherein said TMOF receptor is from an insect.

Claim 28 (Original): The method, according to claim 27, wherein said insect is a mosquito.

Claim 29 (Original): The method, according to claim 25, wherein said receptor comprises SEQ ID NO. 2.

Claims 30-38 (Cancelled)

Claim 39 (New): A method for identifying an insecticidal compound, said method comprising contacting a candidate compound with a host cell transformed to express a polynucleotide encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:2, wherein said polypeptide exhibits trypsin modulating oostatic factor (TMOF) receptor activity; and determining if said candidate compound binds to said polypeptide.

Claim 40 (New): The method, according to claim 39, wherein said polynucleotide is expressed at the surface of said host cell.

Claim 41 (New): The method, according to claim 39, wherein said host cell is a prokaryote.

Claim 42 (New): The method, according to claim 39, wherein said host cell is a bacteria.

Claim 43 (New): The method, according to claim 39, wherein said host cell is *Escherichia coli* or *Salmonella*.

Claim 44 (New): The method, according to claim 39, wherein said host cell is a eukaryotic cell.

Claim 45 (New): The method, according to claim 39, wherein said host cell is a yeast cell.

Claim 46 (New): The method, according to claim 39, wherein said host cell is an algae cell.

Claim 47 (New): The method, according to claim 39, wherein said host cell is a plant cell.

Claim 48 (New): The method, according to claim 39, wherein said host cell is an animal cell.

Claim 49 (New): The method according to claim 39, said method further comprising characterizing the insecticidal activity of said candidate compound using a bioassay if said candidate compound binds to said polypeptide.

Claim 50 (New): The method according to claim 39, said method further comprising incorporating said candidate compound into a formulated product if said candidate compound binds to said polypeptide.